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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 616,372	07 13 2000	Atsushi Komura	1-50	6846

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EXAMINER

SOUW, BERNARD E

ART UNIT PAPER NUMBER

2881

DATE MAILED: 03 31 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/616,372

Applicant(s)

KOMURA ET AL.

Examiner

Bernard E Souw

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 28 February 2003 (Paper #6/a).
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-7, 9-18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-7, 9-18 and 20-22 is/are rejected.
- 7) ☐ Claim(s) 3, 4, 10, 11, 14, 15, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 13 July 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The Amendment A, filed on 02/28/2003, Paper No.6/a, in response to the first Office Action mailed 08/14/2002 has been entered.

Claims 8 and 19 have been cancelled, and claims 1-5, 9-16, and 20-22 have been amended.

The present Office Action is made with all the suggested amendments being fully considered.

Drawings

2. The drawings are objected to because the horizontal axis in Fig.3 is still labeled "LEFT PERIOD OF TIME", the latter having been amended to "EXPOSURE PERIOD" per Amendment A (Paper No.6/a). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

3. The information disclosure statement filed 07/13/2000 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the English translation is not provided by the Applicant. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information

disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Specification

4. The abstract of the disclosure having been properly amended, the previous objection is withdrawn.
5. The wordings "*left period*", "*change-variation*" in various parts of the disclosure having been properly amended, the previous objections are withdrawn.
6. The parameter " σ " having been properly defined by the amended specification, the previous objection is withdrawn.

Reinstatement of Previous Objections

► In the Amendment A, paper no.6/a, page 2, line 3 after Eq. (1), the wording "*The variation is calculated at 3σ* " is not used in conventionally accepted meaning in the statistics: A variation can be *determined* from results of measurements, but not *calculated*, unless the distribution function is *analytically* known. This is the same objection as previously raised in the first Office Action, which objection is herewith reaffirmed. Consequently, the previous objection is here reinstated.

New Objections Regarding the Amended Specification

► In the Amendment A, paper no.6/a, page 2, lines 9-10, in the amended sentence "The graph of Fig.3 varies with every film, and the thickness **variation T indicates the variation in thickness that occurs**", one of ordinary skill in the art understands the wording "variation in thickness that occurs" being no other than the standard deviation σ . This new objection gives rise to a multiple of new objections against all parts of the specification, in which S (defined as 3 times the standard deviation, i.e., $3 \cdot \sigma$) and T ($=\sigma$, or in its broadest sense, a multiple of σ according to the new amended definition, as understood by one skilled in the art) appear together, e.g., in Eq. (1), because under the new amended definition of T the equation becomes not understandable. This new objection also gives rise to a multiple of new rejections under § 112, in which the indefinite expression of Eq.(1) is recited as claim limitations (this refers to claims 4, 11, 15, 22).

In order to proceed with this Office Action, the previous position taken by the Examiner is resumed, i.e., in accordance with the previous rejections of claims 4, 11, 15 and 22 recited In the first office Action, wherein S and T are interpreted as being two statistically independent standard deviations (or multiples thereof), one (T) resulting from the process of measuring the film thickness that produces a variation in the apparent thickness the other (S) resulting from the process of forming the oxide film that produces a variation in the physical thickness.

► In the Amendment A, paper no.6/a, page 2, lines 1-2, in the amended wording "*an allowable thickness variation with respect to latitude (specification) for process control*"

.... etc.”, due to the amended new definitions of S and T objected above, the previously vague definition of U in Eq.(1) has now become not understandable, because it loses all its possible meaning, and hence, becomes indefinite. This new objection inevitably gives rise to a multiple of new rejections under § 112, in which the indefinite expression of Eq.(1) is recited as claim limitations (this refers to claims 4, 11, 15, 22).

► In the Amendment A, paper no.6/a, page 3, lines 11-14, if in the formula (2) the period t is set to zero ($t=0$ in Eq.(2)), the thickness of the gate oxide, $y = y(t=0)$, is not 0 Å as recited by Applicant, but negative infinite ($-\infty$). Applicant is violating a law of mathematics, and hence, Eq.(2) is now rejected under § 101 (inoperative) by Applicant's own amended interpretation. This is a new objection, which also gives rise to a new § 101 rejections of all claims reciting Eq.(2) as limitations (i.e., claims 3, 10, 14, 21). Eq.2 was previously declared “indefinite” by the Examiner in the first Office Action due to a previous indefiniteness of the wording “*left period of time*”. Applicant's amendment of the wording “*left period of time*” per Amendment A (paper no.6/a) has removed the previous indefiniteness, but on the other side has led to the inoperativeness of Applicant's definition, or interpretation, of Eq.(2).

► In the Amendment A, paper no.6/a, page 4, lines 8-9, the amended sentence “[~~change-variation in~~] **variation in change** of the thickness ...” is not understandable. In order to proceed with this examination, the wording is interpreted as “*variation in **an increase** of the thickness ...*”, as is also understood by one skilled in the art.

Previous 35 USC § 112 Claim Rejections Withdrawn

7. Claims 1, 2, 5, 9, 12, 13, 16 and 20 having been amended regarding the indefinite term "left period of time", their previous rejections under 35 U.S.C. 112, first and/or second paragraphs, are herewith withdrawn.

New Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 3, 10, 14 and 21 are rejected under 35 U.S.C. 101, because the claimed invention is inoperative. The inoperativeness is here a consequence of the claim limitation $y = a \cdot \ln(t) + b$, which, according to Applicant's definition or interpretation (Amendment A, paper no.6/a, page 3, lines 11-14), would result in $y=0$ for $t=0$. Applicant is here using a new mathematics that is fully different than what is conventionally accepted. According to conventional mathematics, $y = y(t=0)$, is not 0 Å as recited by Applicant, but negative infinite ($-\infty$).

New Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 4, 11, 15 and 22 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 4, 11, 15 and 22 recite the limitation of Eq.(1), which, due to the Amendment A, paper no.6/a, page 2, lines 9-10, as discussed above, has become not understandable, and hence, indefinite.

Previous 35 USC § 101 Rejections Reinstated

10. Insofar as the Examiner can ascertain beyond the new rejection due to "inoperativeness" under new 35 U.S.C. 101, as stated above, claims 3, 10, 14 and 21 *stand* rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, *as already applied in the previous Office Action*.

Interpreted in light of the specification, claims 3, 10, 14 and 21 do not recite any method that can be claimed, but just an equation or formula (i.e., Eq.2, under a corrected interpretation as understood by one skilled in the art), which is not invented by Applicant but is widely known in the art in various forms of empirical formulas, as admitted by Applicant himself on pg.15/II.17-20, and evidenced by Huang (USPAT 6,221,790 B1) in Fig.2 and Col.2/II.11-25.

Given a behavior shown in Huang's Fig. 2, it would have been obvious to one of ordinary skill in the art at the time the invention was made to derive an empirical formula such as Applicant's. The behavior shown in Huang's Fig. 2, approximated by whatever

Art Unit: 2881

mathematical form, is a result of natural law, which always occurs without any active manipulation by the Applicant. As such, it belongs to non-statutory subject matter that cannot be claimed.

The above statement is an Official Notice taken by the Examiner, which is here supported by a large number of prior arts, e.g., (1) *Salmon et al.* (PTO-892) pg.272/Col.2, Eq.(2), referring to two references (Beaunier et al., 1984, and Dorlot et al. (1986), reciting that the logarithmic law is typical for the growth of thin oxide films, and (2) Schell et al., FZR Report 05/10/1999 (PTO-892), pg.2, Fig.2 + 2 lines below Fig.2.

11. Insofar as the Examiner can ascertain beyond the new rejection due to "indefiniteness" under new 35 U.S.C. 112, as stated above, claims 4, 11, 15 and 22 *stand* rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, *as already applied in the previous Office Action*.

Interpreted beyond the above new rejection due to "indefiniteness" under new 35 U.S.C. 112, claims 4, 11, 15 and 22 do not recite any method that can be claimed, but just an equation or formula, which is widely known as a basic formula in the field of statistics, expressing the addition of two statistically independent variances T^2 and S^2 , one (T) resulting from the process of measuring the film thickness that produces a variation in the apparent thickness the other (S) resulting from the process of forming the oxide film that produces a variation in the physical thickness. The mathematical formula recited in Applicant's claim is a *statistical formula that is always be established*

any active manipulation from the Applicant. As such, it belongs to non-statutory subject matter that cannot be claimed.

Previous 35 USC § 112 Rejections Reinstated

12. Claims 3, 10, 14 and 21 *stand* rejected under 35 U.S.C. 112, first paragraph, in addition to the previous rejection under 35 U.S.C. 101, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Neither the specification nor any of the claims teaches how to obtain the factor “*a*” required to calculate the real thickness according to Applicant's formula, $b = y - a \ln(t)$ where *b* is the real thickness of the oxide film, *y* the measured value of thickness, and *t* is the time of exposure to atmospheric environment. In particular, the claim language that “*a* is a **constant determined based on atmosphere around the oxide film**” does not teach any prospective user how to make and/or use Applicant's invention.

Applicant is expressly cautioned not to introduce New Matter in obviating this 35 U.S.C. 112, first paragraph rejection.

13. Claims 3, 10, 14 and 21 also *stand* rejected under 35 U.S.C. 112, second paragraph, in addition to the previous rejections under 35 U.S.C. 101 and 35 U.S.C. 112, first paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

If "b" is already known as the *real* thickness of the oxide film, as recited in the claim, as well as in the specification, as admitted on pg. 10 lines 3-4, and confirmed by Amendment 6/a, page 3, line 8, "*The constant b is a thickness of the oxide film measured immediately after the gate oxide film 8 is formed*", why would anyone spend more time and energy for measuring the parameter once again, using Applicant's suggested method and/or formula?

14. Claims 4, 11, 15 and 22 are also rejected under 35 U.S.C. 112, second paragraph, in addition to the previous rejections under 35 U.S.C. 101, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Interpreted in light of the specification, claims 4, 11, 15 and 22 do not recite any method that can be claimed as invention, but just a conventional equation or formula, which is furthermore widely known and can be found in many textbooks on statistics. This Official Notice is supported by a course #CHM.167. in "Introduction to Statistics" given at the University of Massachusetts at Dartmouth, created 08/01/1995 (PTO-892), pg.1, equation for $SE_{\text{sum or difference}}$.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 5, 12, and 16 *stand* rejected under 35 U.S.C. 102(a) and (e) as being anticipated by Huang (USPAT 6,221,790 B1).

Huang discloses a method for measuring thickness of an oxide film, as recited in Col.1/II.5-7. Huang's method is based on a Prior Art (Rudolph Corp.), as recited in Col.2/II.11-25. Huang's Prior Art's method comprises:

- forming an oxide film on a substrate, as recited in Col.1/II.5-7;
- measuring an "*exposure period of time from a time at which the thickness of the oxide film is measured*", as illustrated in Fig.2 showing elapsed (=left) times from 0 to 150 days and from 150 days to about 315 days;
- measuring the thickness of the oxide film by irradiating the oxide film with light, as recited in Col.2/II.11-16, in accordance with the "*exposure period*", as shown in Huang's Fig.2.
- especially regarding claims 5 and 16, the step of washing (i.e., cleaning) the oxide surface prior to conducting thickness measurements is shown in Fig.2 and recited in

Col.2/II.18-23, i.e., 150 and/or 315 days after the formation of the oxide film prior to starting a thickness measurements, as recited in Col.2/II.19-25.

- especially regarding claims 12 and 16, the additional steps of "*determining whether the oxide film thickness falls in a desirable range*", and "*performing a succeeding step for manufacturing the semiconductor device when the oxide thickness falls in the desirable range*" are quite trivial for being inherent and/or conventional in every semiconductor manufacturing process (quality control).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Insofar as the Examiner can ascertain beyond the above § 112 rejection, claims 2, 9, 13, and 20 *stand rejected* under 35 U.S.C. 103(a) as being unpatentable over Huang and his Prior Art (PA).

Huang recites all the limitations of claims 2, 9, 13, and 20, except the recitation of correcting the thickness of the oxide film based on the "*exposure period*" to obtain a real thickness of the oxide film. However, given the knowledge of apparent thickness increase as shown in Fig.2, tracing back the apparent thickness to its initial value using a conventional logarithmic law is one of the most primitive and straightforward way obvious to one of ordinary skill in the art. This Official Notice taken by the Examiner,

which is here supported by a large number of prior arts, e.g., (1) *Salmon et al.* (PTO-892) pg.272/Col.2, Eq.(2), referring to two references (Beaunier et al., 1984, and Dorlot et al. (1986), reciting that the logarithmic law is typical for the growth of thin oxide films, and (2) Schell et al., FZR Report 05/10/1999 (PTO-892), pg.2, Fig.2 + 2 lines below Fig.2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to correct the thickness of the oxide film based on the "exposure period" shown in Huang's Fig.2, since such a corrective action involves only routine skill in the art.

One would have been motivated to obtain the correct oxide thickness, since this parameter is crucially important for the proper function of a semiconductor device, as implicated by Huang in col.1/ll.12-34.

17. Insofar as the Examiner can ascertain beyond the above § 101 and § 112 rejections, claims 3, 10, 14, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang and his PA.

Huang recites all the limitations of claims 3, 10, 14, and 21, except the recitation of correcting the thickness of the oxide film by means of a formula which is not invented by Applicant but is widely known in the art in various forms of empirical formulas, as admitted by Applicant himself on pg.15/ll.17-20, and evidenced by Huang in Fig.2.

This Official Notice taken by the Examiner, which is here supported by a large number of prior arts, e.g., (1) *Salmon et al.* (PTO-892) pg.272/Col.2, Eq.(2), referring to

two references (Beaunier et al., 1984, and Dorlot et al. (1986), reciting that the logarithmic law is typical for the growth of thin oxide films, and (2) Schell et al., FZR Report 05/10/1999 (PTO-892), pg.2, Fig.2 + 2 lines below Fig.2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to correct the thickness of the oxide film according to any empirical formula to Huang's Fig.2, since such a corrective action is the most simple and primitive method of correction that only involves routine skill in the art.

18. Insofar as the Examiner can ascertain beyond the above § 101 and § 112 rejections, claims 4, 11, 15 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang and his PA.

Huang recites all the limitations of claims 4, 11, 15 and 22 , except the recitation of an equation widely known as a basic formula in the field of statistics, expressing the addition of two statistically independent variances T^2 and S^2 , one (T) resulting from the process of measuring the film thickness that produces a variation in the apparent thickness, the other (S) resulting from the process of forming the oxide film that produces a variation in the physical thickness.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to observe and verify that Applicant's results of measurements do follow a well known and well established statistical formula, since such a verification only involves routine skill in the art.

19. Claims 6, 7, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang as applied to claims 5 and 16 above, and further in view of Torii et al. (USPAT 5,972,862).

► Huang recites all the limitations of claims 6 and 17, except the recitation of washing the oxide surface using a solution containing at least one of H_2SO_4 and HCl .

Torii et al. teach that washing an oxide surface may be performed by using a cleaning liquid containing sulfuric acid (H_2SO_4) and chloric acid (HCl), as recited in Col.5/ll.22-30.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to clean an oxide surface using a solution containing at least one of H_2SO_4 and HCl , since such solution is a standard cleaning solution well known in the art.

► Huang recites all the limitations of claims 7 and 18, except the recitation that the cleaning solution of claims 6 and 17 is one of a mixed solution of H_2SO_4 and H_2O_2 , and a mixed solution of HCl and H_2O_2 .

Using or adding H_2O_2 (hydrogen peroxide) in an oxide cleaning solution is well known in the art, as disclosed by Huang in Co.2/ll.21-23. Further support for this Official Notice is provided by Morinaga et al. (USPAT 5,885,362), as recited in Col.13/ll.63-67.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add H_2O_2 (hydrogen peroxide) into Torii's oxide cleaning solution, since such an addition is a well known in the art.

Final Rejection

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. New cited Prior Arts (PTO-892) are supports for Official Notice made in this and the first Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Response to Applicant's Arguments

21. Applicant's arguments filed on 02/28/2003 have been fully considered but they are not persuasive. Examiner's response to Applicant's arguments has been implicitly included in the new and reinstated rejections stated above.

Art Unit: 2881

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw whose telephone number is 703 305 0149. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 703 308 4116. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9318 for regular communications and 703 872 9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

bes
March 18, 2003

SUPP